SUPPLEMENT.

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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ROCKS AND MINERAL DEPOSITS OF SOUTH AFRICA.—No. II.

Table Mountain Sandstone.—The highest and most bulky mountains of Namaqualand are formed by that peculiar—principally quartzose—rock, which is capping almost all the principal mountains of the western part of South Africa, from Table Mountain (from which it has derived the name of "Table Mountain sandstone"), near Cape Town, to the mountains of Great Namaqualand; and which rock, as it forms so conspicuous and so characteristic a part in the geological features of this portion of South Africa, would claim somewhat more than a passing notice. That rock appears to have formed one large and extensive stratum, at a period when the immense masses of boulders, conglomerates, sand, &c., which we find now along side and respective between the still towering "ruins" of it—that is, between those mountain masses which are now still covered by that Table Mountain sandstone—were still forming part of the rock, by the disintegration, decomposition, and changing of which they have been brought, and are still being brought, to the condition in which we find them now; in which period that stratum was not yet split into the different mountain masses and groups, by valleys and ravines, &c., being worn into it, and in many places through it into the base rock below, and in which period that rock must have been forming, in one large and uninterrupted strip, the westernmost edge of the table-land of South Africa, running, as the highly quartzose axis of density of the grand, but slow, geological metamorphosis of the granitic base rock of that portion, from Table Bay to Great Namaqualand, and occupying in the main the very same geographical position, which is most conspicuously marked out at the present time still, by those high and bulky mountain masses, which by their appearance (but not their height) remind one of Alpine scenery.

By counting and measuring the different sub-strata of that rock, and their divisional planes, and by comparing the respective level of corresponding and homogenous strata of different mountains (say on either side of a large valley) with each other, one is naturally led to adopt the above view, rather than the idea, that those masses of rock had been raised to their present level by their base rock upheaving them from underneath; that stratum of Table Mountain sandstone has either not been upheaved at all, or the whole of it, from Table Bay to the Orange River, must have been upheaved all at once, by a simultaneously and uniformly acting force; for whatever heaves, dislocations, &c., there can be traced in that rock, can without exception be accounted for by the weight of those masses, yielding of the base rock (*i. e.*, when that base rock was decomposing) &c. That rock forms the most bulky mountain ranges near Cape Town, Stellenbosh, Draakensteen, Malmesbury, Picketberg, Clanwilliam (Namaqualand.) Its strata are in the main horizontal, especially on the higher levels (*i. e.*, Table Mountain); and their dip seems to depend a great deal upon the local position of the respective portion of that rock; for I observed that the dip appears to increase whenever approaching to, and situated in, lower levels; and on the coast (*i. e.*, west coast of Namaqualand), and on the edges of the greater and deeper basins of the interior, the dip is often considerable (from 45° to 55°); and when the horizontal strata on higher levels generally form bulky mountain masses, with their tops flat, or only slightly undulating, the inclined strata of the same rock on lower levels, rise mostly in the shape of sharp ridges, above the surrounding country (for example, the "Two Sisters" Mountains, near Cape Voltas). Inclined strata of that rock are often found in close vicinity to the horizontal strata of the same rock (the latter then being invariably on a higher level than the former), naturally suggesting by their mutual position the idea, that all of them, the inclined stratum as well as the horizontal, must at one period have been forming one stratum (horizontal), and that by the lower portion of, and part of the base rock perhaps underneath that part of the stratum, which was situated on the side towards the lower level, being worn away in a higher degree, on account of being more exposed to atmospheric action (its cleavages being wider, and open to a greater depth; and by subterranean mechanical and chemical action of water-currents, which naturally would take place in a direction from, and in an increased ratio from the higher towards the lower levels), than the remaining, more interior, higher portion, that one edge (here western) of the stratum would be caused to sink gradually, in consequence of which that sinking portion would, on account chiefly of its own gravity, separate itself on one or more places from the remaining horizontal higher portion, thus forming one or more fissures, which naturally would get wider, in the same proportion as that sinking portion did sink deeper, and slope away farther from the parent stratum. Instances where such is the case may be noticed near N'Omis, Kabous Kerk, Zabisis, and numerous other localities. There are some places where that phenomenon seems to have commenced at a not very remote period: fissures, at a little distance to the east from the western edge of the higher plateau, often not broader than 100 to 200 paces, where the layers of that rock are on the one side exactly the same number, and of the same nature, as the corresponding layers on the other side; but where, when on the one (inner, eastern) side, those layers are almost perfectly horizontal, those on the opposite side (towards the western edge) are dipping to the west.

The numerous fissures and caves which occur in that rock are generally less large and extensive there where the rock has still retained its original horizontal position, than where it has a dip (greater or less); but in the former, as well as in the latter, the shape of those caves corresponds exactly with the respective natural fissures of the rock; thus clearly indicating that they are nothing else but the results of certain portions—perhaps softer portions—of the rock having been worn and washed out, chiefly, perhaps, by the agency of water (caves of that nature are more frequent on higher levels), or by a natural cleavage, from having been widened, by the respective masses of rock being doomed to separate (or dislocated) from each other; there being, in not one single instance, a necessity of resorting to the fantastic supposition, that such caves had been caused by large bubbles of gas having formed themselves when the rock had been in a still hot fluid state; my belief being that it was never in a more fluid state than it is just at present; and that, when formed (and it is partly forming now still in some localities, see below), its nature was exactly the same as it is now.

The largest of such caves I noticed on the higher levels, and where the rock is horizontally resting upon its base rock: on and behind Table Mountain; near Hovt's Bay, Picketberg Mountains; in the vicinity of Weyport, and many other places. On lower levels (and where the rock is more or less dipping), on the west coast of Namaqualand; near Kodas, N'Omis, Kabous Kerk, Leckersing, &c. Many of such caves are inhabited by numerous bats, and the atmosphere within them is so highly impregnated with an ammonical smell, as to render breathing difficult, and to affect the eyes. (Would bat's dung be better than guano for manure?)

The nature, density, and thickness of the respective substrata of this rock differ, according to their respective position—that is, according to whether they are closer to, or more distant from, the base rock. It is generally to be noticed that, where the rock is horizontal, there the higher layers are more quartzose—right on the top of the respective mountain almost purely so—and colourless; and that towards the lower levels there enter into the composition of the rock gradually components of a more ferruginous, feldspathic, micaceous, and talcose nature (meaning thereby the chemical components of felspar, mica, &c., as well as small particles or fragments of the said minerals themselves.) Thin seams of a slaty (reddish-brown ferruginous, or light talcose) nature are often noticed lining the main divisional planes of the substrata of that rock, and within and near to such are to be traced a greater amount of components of a softer nature than quartz. Facts which I have frequently observed with respect to that Table Mountain sandstone—that that rock invariably rests upon granite of a chiefly felspathic and quartzose nature, with hornblendic ingredients occasionally (seldom, and only locally, overlapping clay-slate with its edge); that that base rock, wherever it is approaching to, and in contact with that superincumbent rock, assumes a peculiar change in its components; the latter (felspar crystals) getting, as it were, broken up and decomposed, partly softer and more argillaceous, partly harder and more silicious; flakes of dark mica changing into reddish-brown,&c.—I found that, especially in water-worn localities, and where the base rock was fully exposed to observation (near Cape Town, Stellenboch, Kabous Kerk,* in Namaqualand, &c.) the cleavage fissures of that base rock lined with stripes of a quartzose rock of exactly the same nature with those larger masses of quartz rock (specimens of which are in my possession), suggesting by their nature and position, especially if compared with the Table Mountain sandstone close by, the idea that these stripes, by increasing and developing themselves in the same proportion as that granitic rock gets affected in its nature by the decomposing and changing influence of the common subterranean and surface agents of nature (water, air, electricity, &c.), would, in the course of time, increase in depth, breadth, and thickness, so as to form at last one solid mass of quartz;—that that superincumbent rock (Table Mountain sandstone) bears a striking resemblance to its base rock in the disposition of its cleavage fissures and shape of its blocks, the difference being that the blocks of the latter are about as much larger in size than the blocks of the former, as the bulk of the felspathic, micaceous, &c., components in the latter might amount to; the blocks being otherwise perfectly alike in shape (being parallelopipedic); that large boulders of such granite, which happened to be flat on the top (that is on their upper order), were, in their components, more quartzose towards that top, than in other parts:—all those, and many more facts too numerous to mention, have brought me gradually to the conviction, that the whole of that extensive stratum of (quartzose) rock, which once formed the whole surface of, and which is now still capping the principal mountains on, the westernmost edge of the South African table-land, has been formed by the granitic base rock having, from its flat surface downwards, undergone a change in, and a different arrangement of, its components by the soft and easier soluble of its components (felspar, mica, hornblende, &c), whose decomposition and ultimate destruction is caused by the common chemical agents of Nature, being more absorbed, or, as it were, washed out, on and from that surface (and the cleavage fissures) downwards than quartz; which latter, on account of being more simple and less soluble, would thus be left behind in larger quantities than the former, and gradually increase proportionately in bulk, when the former are more and more absorbed and carried away by water, &c.; that by that process there has been formed in the course of time a siliceous crust, the chief ingredients of which did once form a component in the base rock, and that the whole stratum of Table Mountain sandstone is nothing else but such a siliceous crust, all the changes and variations in position, dip, &c., of which have not been caused by any violent subterranean upheaves, but can invariably be traced to a depressing of some portions, which, when the lower portions were being worn away, did gradually sink, following the impulse of their own gravity,—and other similar causes.

* In the syenite of Kabous Kerk, and the mountain ranges to the south-south-west from there, those quartzose linings within the cleavage fissures of the granite have developed themselves so regularly and uniformly, that they form there perfect parallelograms, inasmuch as those silicious linings stand forth in relief above the granitic rock; because, on account of their greater hardness, they are less affected by the decomposing agents than the granite itself.

GEOLOGY—PRIVATE LECTURES ON THE EARTH—No. II.

PRODUCTIONS OF THE PRESENT, AND RELICS OF THE PAST.

The next zone which we shall now proceed to examine is one remarkable for its rich and profuse vegetation.

Torrid Zone.—As we found in the south temperate, a poverty of species to be a part of the general feature of that region, so do we find the contrary rule, in a corresponding degree, to be a characteristic of the equatorial zone. The inferiority in the *individual* development of species, as compared with the south temperate flora, is here compensated for by the abundance and diversity of forms. A comparison of the vegetation of New Zealand, with that of the Phillipines, would alone be sufficient to enable us to comprehend the striking contrast between the imposing grandeur and luxuriance of the south temperate flora, and its profuseness in the torrid zone. Gigantic forms, truly belonging to the temperate regions of the southern hemisphere, extend, in many instances, to the forests of the tropical countries; such for instance as arborescent grasses and tree-ferns; these, however, only form a portion of the innumerable number of groups here abounding; and moreover, these require particular physical conditions, in order to approach their maximum, or even to flourish at all. Our course then, in giving the peculiar feature of the physiognomy of nature in this zone, will not be to enumerate the several species, or even genera, with which it abounds, but rather to consider such forms as are predominant in connection with the general aspect of the whole. Such a mode of proceeding brings us to the conclusion that diversity of forms and perfection, not in the magnitude, but in the elaboration of the individual, form the distinguishing feature of the torrid zone. Dr. Hooker observes, in reference to a portion of this zone, that—"India contains representatives of almost every natural family on the globe—a very few small South American, Australian, South African orders being the chief exceptions." And again—"The general physiognomy of the greater part of the Indian flora probably approximates more to that of tropical Africa than of any other part of the globe," &c.† The orders *euphorbiaceæ* and *scrophularia*, according to this distinguished botanist, are universally present in India; and Prof. Balfour informs us that the former abounds in Equinoctial America. Palms and bamboos are the principal productions of this zone; nearly all those social plants which give such a character and uniformity to the north temperate vegetation being absent. The tropical forests of America, the South Sea Islands, and even Africa, according to some accounts, are rich in balanophoræ of the most varied forms and colours.* It will be sufficient for us to notice that the forms prevaling in this zone are principally *palmæ*, *musaceæ*, or the banana family, *pandanus*, a genus of the screw-pine family, with sugar-canes and bamboos.

North Temperate Zone.—The tree-ferns and palms scarcely extend, even in a diminutive form, to this zone. It was noticed that they predominate and luxuriate to gigantic dimensions in the south temperate, even to the margin of the south frigid; whereas, in the north temperate they become mere herbaceous shrubs, and are altogether wanting in arborescent forms. The tree-ferns, in fact, terminate in the northern tropics, a few having been seen in the Isthmus of Darien, and also in parts of Northern Africa. Here we find the small grasses, rich meadows, shrubs, and stunted trees everywhere prevailing; such palms and other tropical trees as do penetrate the warmer portions of this zone are characterised by being dwarfish. Those plants which, in the south temperate and the tropics, bore flowers of magnificent growth and development, but which may be said to be almost inodorous—particularly in the former zone—are found in the north temperate, with small insignificant flowers, but which, on the contrary, secrete odoriferous oils and gums. Although the gigantic forms of ferns, palms, and coniferous woods do not flourish here; yet this zone is more prolific in the variety of the lesser vegetation and animal forms. The same general conditions prevail both in America and Europe in corresponding zones, with the exception that the quadrupeds which inhabit North America belong to peculiar races, and are analogous to those in South America. As regards Europe, the Mediterranean Sea has doubtless proved a great physical obstacle to the propagation of tropical forms, and is the cause of the very abrupt change observed, both in the vegetable and animal productions, from the tropics to the north temperate zone.

So far, we have considered the organic productions of the different zones only in regard to the vegetable world. We will now take a rapid glance of the animal creation, which we shall find obeying the same laws that regulate the botanical distribution of the organic world.—Firstly, as regards the geographical distribution of fish. Sir C. Lyell observes that—"The genera of freshwater fish in China agree closely with those of the peninsula of India, but the species are not the same." This latter condition could scarcely be expected, for as Sir John Richardson very justly remarks—"As in the distribution of marine fish, the interposition of a continent stretching from the tropics far into the temperate or colder parts of the ocean, separates different icthyological groups; so, with respect to the freshwater species, the intrusion of arms of the sea running far to the northwards, or the interposition of a lofty mountain chain effects the same thing. "The freshwater fish of the Cape of Good Hope, and the South American ones, are different from those of India and China," &c. "A great many species are common to the opposite sides of the Indian Ocean, inhabiting alike the Red Sea, the eastern coast of Africa, Madagascar, the Mauritius, the northern coasts of Australia, and the whole of Polynesia!"‡ The whole of this great range is comprehended in the torrid zone, whilst the south temperate abounds principally in forms of gigantic size, such as the largest kinds of sharks, as well as other representatives of this division of the animal kingdom.

According to Dr. Livingston, the celebrated African traveller, the same feature exists among the elephants of the tropical and south temperate regions of Africa, for he observes, at the meeting of the Society of Arts, that—"On going north he found the number of animals increase, but they were *not of such large growth as in the south.* Towards the southern part they were 12 feet high, and he found that much further north they were 3 feet lower," &c. But none perhaps of all the animate creation is of more importance, in a geological point of view, and presents greater facilities for investigation than the Mollusca.

The *nautilus*, *harpa*, *terebellum*, *pyramidella*, *perna*, and several other genera are exclusively confined to the torrid zone. In the seas of the south temperate are found *trigonia*, *conchelopas*, &c. Corals and sponges abound along the coast, even as far south as Van Diemen's Land; whilst the *terebratula* inhabit the shallow water on the coast, and the *trigonia*, *cerithium*, *isocardia*, *cardium*, and the marsuphial race, are characteristics of the colder portions of the southern hemisphere. The genus *lingula* is found to a great extent in Australia, at small depths, and even at low water, half buried in sand. Land-snails are peculiarly abundant in the northern hemisphere; and of these the genus *helix* appears to be most characteristic; "it reaches from Norway to Italy," and "is also said to occur in the United States and in Newfoundland."‡

† *Intro-Essay to the Flora Indica*, by J. W. Hooker, M.D., &c.; and T. Thomson, M.D., 1855.

* Meyen. † Sir C. Lyell. ‡ Sir C. Lyell.

PRODUCTION OF ALUMINIUM IN A PRACTICAL AND COMMERCIAL FORM.

Mr. W. E. Newton (for a foreign correspondent) h as patented a process, by which the production of aluminium is reduced to an essentially practical and commercial form. It has hitherto been the practice to effect the reduction of aluminium from its different compounds (single or double chlorides or fluorides) in closed vessels, and in published descriptions on this subject it has been usual to mention the employment of crucibles enclosed in tubes or retorts of fire-clay, coated with alumina. As the employment of these apparatus is attended with disadvantages, the inventors have, in the first place, substituted for such apparatus vessels made of cast or wrought-iron, of varying form, but generally approaching that of crucibles, pots, or seggars, in which vessels the reaction is effected in the same manner as in vessels of clay. The inventors of the present improvements have also succeeded in effecting the reduction in chambers made of brickwork or fire-clay, which may be either heated in the same manner as a reverberatory furnace, or by the transmission of heat through the sides. The apparatus employed by preference, however, is a reverberatory furnace, the bed of which, having a portion of it inclined, is arranged in a suitable manner for facilitating the collection of the metal as it is produced; but the furnaces ordinarily employed for the manufacture of soda may be used for this purpose. Another improvement consists in modifying the composition of the mixture of matters for effecting the reaction in such a manner as to ensure successful operation, even when operating upon small quantities of materials, or with vessels of small capacity, such as clay retorts or other closed vessels. This is effected by wholly, or to a great extent, dispensing with the marine salt, which is usually added either to the simple chloride of aluminium, the double chloride of aluminium and sodium, or to the fluoride of aluminium and sodium (cryolite), and in simply adding a suitable proportion of fluoride of calcium. The use of marine salt has been hitherto considered necessary for the successful performance of the reduction, and indispensable as a flux for causing the metal to unite; in operating with the double chloride of aluminium and of sodium it had been pointed out, and always employed in the proportion of 50 per cent. to the double chloride. It has been found by experience that by diminishing this proportion better results are obtained, and that

by dispensing with the marine salt altogether the largest quantity of metal is obtained. The following is the mode of operating, according to this improvement, when it is required to effect the reduction of the double chloride:—Take of the double chloride of aluminium and of sodium, 100 parts; fluoride of calcium, 50 parts; sodium, 20 parts. (These proportions may, however, be somewhat varied, according to circumstances.) These substances having been mixed together, are introduced upon the bed of the furnace, previously heated to redness. The fire-bars having been well fed with fuel, the furnace is closed. The reaction will then take place, and by agitating the materials all the aluminium will be collected in a mass at the inclined part of the bed, and may be run off therefrom. By first pouring off the whitest and most fluid portion of the scoriæ, composed chiefly of the marine salt which has been produced by the reaction, the fluoride of aluminium (which is also an accessory product of the reaction) may also be extracted therefrom. The appearance of the scoriæ remaining is very peculiar, after cooling; it is slightly tinged with a colour approaching a yellowish grey. This scoriæ does not contain the finely divided aluminium powder which is met with when the reaction is produced with marine salt; it only contains sometimes globules of aluminium, in sufficient quantity to enable it to be collected by pulverising and washing the mass. When, on the contrary, marine salt is employed, the mass of scoriæ is of a decided deep grey colour; this colour arises from the aluminium powder mixed with the mass, in which are found only microscopic globules, which are at first difficult to collect and unite by melting.

Meetings of Mining Companies.

GREAT WHEAL VOR UNITED MINING COMPANY.

The annual meeting of proprietors was held at the offices of the company, Gresham House, Old Broad-street, on Wednesday,—Mr. E. V. NEALE in the chair.

Mr. ALISON (the secretary) read the notice convening the meeting, and the following report of the committee:—

The committee, in calling the attention of the adventurers to the auditors' report, and the accounts to Jan. 31, which have already been circulated among them, have again to congratulate their fellow-shareholders on the improved and improving condition of the mines, for the details of which they must refer to the manager's report, which will succeed this.

The call has been paid in a manner perhaps unprecedented in the records of any similar adventure, the amount in arrear at this time, upon 44,956*l.*, being only 670*l.*, of which 176*l.* is on shares still unregistered. The accounts that have been laid before you show that after allowing for the value of the 426 shares still remaining to be issued, the assets were, on Jan. 31, equal to the liabilities, a state of affairs very different from that which existed six months ago.

Wheal Metal continues quite as valuable as when the last meeting was held. The lodes on an average maintain their richness; the reserves are increasing as new ground is laid open, and your committee have the utmost confidence that this portion of the mines alone will continue to yield, as it has for some time done, large profits.

As to the Old Mine, although the drainage has not proceeded since the commencement of the present year at the rate that was anticipated, from circumstances more fully detailed in the manager's report, yet very great progress has been made in opening up and clearing the ground already unwatered. The returns are steadily and largely increasing, while new discoveries of the greatest promise and importance have been made, of which the result will in time become perceptible in the increased sale of tin from this portion of the works.

The circumstances referred to as having caused delay were the breaking of the capstan rope while letting down pitwork, and the breakage of the rods in Crease's shaft; these are accidents not connected with the regular operations of the mines, nor implying any want of efficiency in the machinery. The damages have now been repaired, and the works are placed in even a better condition than before; and the accident has called forth an energy, alacrity, and display of goodwill that reflects the highest credit on the manager, agents, engineers, pitmen—and, in fact, upon all and every one connected with the mines.

The committee have not yet received the February cost-sheets, but may mention that the sale on Feb. 14 was 66 tons 5 cwts. 3 qrs. 3 lbs., producing 5501*l.* 3s. 6d.; and that on March 14 (Saturday last) 68 tons 8 cwts. 1 qr. 8 lbs, producing 5677*l.* 3s., and they see no reason to doubt the correctness of the estimates furnished them, that they will be able to sell 1000 tons black tin during the present year.

A statement of accounts was submitted, from which it appeared that, on Jan. 31, the cash at bankers in London was 6726*l.* 3s. 8d.; at Helston, 56*l.* 16s. 3d.; bills in hand, 5843*l.* 16s. = 12,626*l.* 13s. 11d.

The CHAIRMAN said, with respect to Wheal Metal, he might say positively that it had never been in so good and satisfactory a state. They never had such a large quantity of tin laid bare, and there never was a time when the reserves had been so large. (Hear.) Some parties were of opinion that they had only a rich pipe of tin, which, upon going down, would be exhausted. Every result had proved that that opinion was altogether erroneous, as they found in depth a most extensive run of tin ground. At Wheal Vor, they had not gone down quite so fast during the last three months as they expected, but the cause would be easily explained. They had met with two accidents, and a great deal of work had been done in the 194, which would effect a saving in the working to the extent of 3500*l.* However, it was fully expected that they would sink in the next three months more than in the last, and they had no reason to believe that they would meet with any serious obstacle in going down, as, when the two engines were set to work after the accident referred to, they drained 5 fms. in two days. There was another fact to which he wished to call their attention in Wheal Vor:—The mine had been inspected some time back by Capts. Vivian and Thomas, and they reported that the returns from this part of the property would not exceed 1000*l.* per month; but they had averaged 1800*l.* per month, proving that their own agent, Capt. Martyn, was correct, as he expected that the returns would be larger than represented by Capts. Vivian and Thomas, and the result had fully borne out the estimates of Capt. Martyn.

Mr. HUMBY wished to know the estimated value of the reserves at Wheal Metal.

Mr. CREASE replied, 40,000*l.*, and they had a fair lode in the 164 in the Old Mine; but in the present state of the workings, it was wise to be cautious in any statements made.—Mr. Crease then read the following report:—

March 18.—During the last four months the original system for the drainage of the deep workings, and the development of some of the numerous side lodes in this property, has been vigorously and economically carried on. The surface operations, including the surface drainage of the mines, have been effectually carried out. The erections required for some time are nearly completed. The engines and machinery of all kinds are in very excellent working order, effecting more than an average duty. Edwards's portable steam-whim is being removed from Woolf's to Sand-bank shaft, to enable us to sink on Trueman's lode, and communicate with the cross-cut in the 115, north from the main lode, on Woolf's caunter, to Trueman's lode. This done, Trelawny's steam-whim will draw from Woolf's and Trelawny's shafts. The skip and rails at Bounder-shaft, an important point for our deep operations, are in complete working order as deep as the 184, and are being continued as fast as possible to follow the water as it goes down, and draw the tin discovered to surface. The work for the main engine is being pushed forward actively. Instead of the balance-bobs, intended to be connected with this engine, a balance plunger-lift of 19-in. pumps has been put in, and, though causing considerable delay, and keeping us in the 194 far longer than we expected, has effected an ultimate saving, estimated at about 3500*l.*.

The Dressing Department has made a favourable progress, and new machinery have been erected, and is in course of completion: 92 slime frames, to work the slimes from the tin, which is now getting generally of better quality, over two setts of frames, before passing into the Flow, instead of one; when this is completed, we shall have the best stamps and dressing-floors put to work in this county for returning a large quantity of tinstuff, and making the most of the tin. We have stamped and dressed from the stamps-floors in the last three months 7147 tons of stuff, which produced 182 tons 19 cwts. 0 qr. 24 lbs. of black tin, and amounted to 15,299*l.* 16s. 8d.; the actual labour cost in returning the above is 745*l.* 1s. 5d., on the average, about 4*l.* 1s. 5d. per ton of black tin: the average of 1 ton of stuff is about 2 qrs. 1 lb. of black tin, and, with the stamping power, we can stamp one-third part more, if required, with the same number of heads. In the Flow, we have sent over the frames 8060 tons of the poorer stuff in the last three months, which produced 19 tons 4 cwts. 0 qrs. 18 lbs. of black tin, and the amount being 1298*l.* 6s. 4d., and the labour cost for returning is 333*l.* 2s. 10d., or about 17*l.* 10s. 8d. per ton for returning the black tin. As we go deeper, and raise more of the better quality tin, our average cost per ton for dressing the tin will go on to improve. With the present high price of tin, much of the poorer stuff can be profitably dressed, reducing the general average produce, and increasing the general average of our dressing cost, but adding to the general profits for this department.

Our sales of tin for the four months ending with the sale in January have been satisfactory, showing an important monthly increase. We have raised and sold during that period 235 tons of black tin. Since which, in Feb. and March, we have sold 134½ tons. These quantities would have been still greater but for the number of difficulties that had to be overcome in the upper ground workings; in making arrangements for the rod that will be connected with the rod in the 174 to Bounder shaft; in the removal of a large quantity of stuff and old timber mixed up together in every direction at the shafts, and broken away by the weight of our pumps; and also in the necessary repairs. The plunger-lift, which is fixed in the 194, is the last which will be required at this shaft for the final drainage of these mines. Under this will be fixed two temporary drawing-lifts. By this arrangement difficulties similar to those already experienced are not again likely to happen, as we think the shaft is clear for sending away the lifts to bottom, or, at least, to the 236, the deepest point to which the pump-work will be dropped at Crease's, and the workings drained through this shaft until the lode may be cut at a deeper level. From this level (the 236) the drainage to the bottom of these mines will be effected through Bounder shaft, the water delivered through Bounder shaft in the 236, and conveyed to Crease's, will then be lifted to surface. In Trelawny's shaft, numerous delays have occurred during the drainage, particularly in supporting a heavy piece of ground between the shaft, and excavations on the lode from the 184 to the 164; below this depth the shaft appears to be firm, and in good order.

Several minor delays of a temporary and unavoidable nature, small in themselves taken separately, but important taken altogether, have occurred at both engine-shafts. These it was impossible to foresee or guard against, though they have of necessity impeded our progress; we have every reason to believe that these will not again happen, but that the drainage will proceed regularly and rapidly to the 248, or bottom of both engine shafts, and shortly after we hope to reach the bottom of bounder-shaft, which is the deepest point of these mines. We have nearly sufficient pump-work in the mines for the complete drainage. The points from whence we expect to raise tin in sufficient quantities to increase our sales (in addition to the late valuable discoveries in the 154 and 164) will be the 194, west of Trelawny's, and the high ground, thence to the bottom of the mines west of Bounder shaft; also the high ground east of Bounder shaft, from the 194 to the 236, and from the stopes between the 236 and the bottom of the mines.

During the drainage below the 194 fathom level, intermediate levels will be driven into the high ground east and west of Bounder shaft and so continued to the bottom of these mines. By the extension of a few levels at the points where we expect tin, and stoping the backs on tribute, we anticipate raising sufficient quantities of tin to pay the necessary expenses, and to yield a handsome profit to the shareholders.

We have recently made an important discovery, as alluded to above, about midway between Bounder and Crease's shafts by extending cross-cuts 4 fms. south from the former working in the 154 and 9 fms. from the 164. We have intersected what may be considered the main part of Wheal Vor Main Lode, and have driven the 154 east 12 fms., and west 11½ fms., and the 164 1½ fm., each way. The lode in these levels is 2 ft. wide, and for the extent opened on, is worth from 26*l.* to 50*l.* per fm., and presents appearances to warrant the belief that it will increase in value as we go deeper. We shall continue to extend other cross-cuts to this lode, from the 174, 184, and below, as the water is drained.

During the former working of these mines the main lode continued rich and productive to the 144 east of Bounder shaft, at which point it was exceedingly rich; below this level it became divided, the former workers pursued the north part, leaving the south and main part entire and unexplored; this south part, by our recent cross-cuts, we have had the good fortune to intersect, and believe to be a continuation of the rich course of tin formerly known as the Bounder Bunch. Martyn's shaft is now down to the 100, in a good situation for exploring this part of the lode, and directly over the most valuable part of the tin ground, should be continued down when practicable, as sufficient tin will be raised from it, in all probability, to pay the expense of sinking. Crease's shaft should also be continued down. The 154, east of Neale's cross-cut is extending by 8 men, at 7*l.* 10s. per fm., and the 154 west by four men and four boys, at 6*l.* 10s. per fm. A rise is put up and communicated with the level above, and stoping east and west at 3*l.* 10s. and 3*l.* 10s. per fm. A winze is also being sunk, and is now about 3 fms. below the 154, east of Neale's cross-cut, for ventilating the level below and laying open ground for tributers. The lode is 2½ ft. wide, worth 50*l.* per fm. In the same level, midway between Crease's and Bounder, a cross-cut is extended south about 5 fms., intersecting some rich branches of tin, which, about 2 fms. further east unite at one point, where we anticipate a valuable lode: driving by two men at 7*l.* 10s. per fm. A cross-cut is being extended south in the 144, and 5 fms. west of Bounder shaft, towards the main part of main lode, now driven 3 fms.; we expect shortly to intersect the lode by four men, at 8*l.* per fm.

TRUEMAN'S LODE has been opened on for about 100 fms. in extent, and as deep as the 30; this level has gone over 50 fms. of tribute ground which will be worked at moderate tributes when cut into sections as deep as the 40.

Sand Bank shaft is sinking by six men, at 8*l.* per fm., below the 30 on the course of the lode, and is now about 3 fms. below the level, the lode is 4 ft. wide, yielding good work for tin, worth 20*l.* per fm.; it is intended to sink this shaft with all possible speed to the 115, to communicate with the cross-cut north extending on Woolf's caunter from the main lode; as this shaft progresses in depth levels will be taken up at the usual distances and extended east and west on the course of the lode to open ground for the employed of tributers: this lode, as far as we have developed it, has not only produced good work for tin but presents appearances which convince us and lead to the inevitable inference that in depth it will be as valuable as any other lode that has hitherto been worked in these mines; our operations on this lode are now being carried on at profit. The cross-cut referred to above on Woolf's caunter in the 115 is being driven by eight men, at 5*l.* per fm., and will intersect Trueman's lode in about three months' time—possibly less.

WHEAL METAL.—The engine-shaft is being sunk, and is now 5 fms. below the 90 on the Junction of the two lodes; the lode in the shaft is 6 feet wide, worth 100*l.* per fm., with every prospect of improvement—sinking by sixteen men, at 18*l.* per fm. In two months from this time we shall be in a position to drive the 100 east and west. The 90 is extended west from the shaft on Metal and Schneider's lode 11 fms.; lode at present 8 feet wide, worth 200*l.* per fm.—driving by eight men, at 10*l.* 10s. per fm.; the lode in the stopes, in back of the 90, is worth 100*l.* per fm.—working by six men, at 6*l.* per fathom. The 90 is extended east from shaft 3 fms.; lode 6 ft. wide, worth 30*l.* per fm., and from the very valuable tin ground passed over in the 80, over this place, we expect a great improvement shortly—now driving by six men, at 11*l.* per fm. In the stopes in back of the 80, east and west of engine-shaft, 24 men are stoping at about 3*l.* 5s. per fm.; the average value of the lode is 45*l.* per fm. The 80 west is extended 30 fms. from shaft, the whole of this distance is a rich course of ore; lode at present 6 feet wide, worth 40*l.* per fathom. A winze is being sunk below the 80, and is now about 6 fms. below the level in a rich course of tin 6 feet wide, worth 100*l.* per fm.—sinking by eight men and four boys, at 14*l.* 10s. per fm. The 80, east of engine-shaft, is extended 21 fms., and for the greater part of this distance in a good course of tin; in the present end the lode is 5 ft. wide, worth 30*l.* per fm.: judging from the rich run of tin ground passed over in the level above we are daily expecting a great improvement—driving by six men, at 10*l.* 10s. per fathom: in this level, about 10 fathoms east of the shaft, a winze is in course of sinking, and now about 3 fms. below the level; the lode is 6 ft. wide, worth 50*l.* per fm.—sinking by eight men, at 12*l.* per fm. The 70 is extended west upwards of 40 fathoms through a rich lode of tin in places; lode now 3 ft. wide, worth 80*l.* per fm., and from its character, and the great quantity of water issuing therefrom, we believe there is a long run of rich tin ground before this end—driving by three men and three boys, at 11*l.* per fathom. This confirms, thus far, what we led you to anticipate in all our previous reports from the commencement. The 60 is extended about 70 fms. west of shaft, and has passed through occasional rich courses of tin; lode now 4 ft. wide, worth 30*l.* per fm.: suspended until the cross-cut now extending from this level south is communicated with Ivey's shaft, this done it will be once more actively pushed westward. The cross-cut south in the 60, towards Ivey's shaft, is extended 5 fms., and will be communicated in about two months—driving by six men, at 7*l.* per fathom. In the 70 west a cross-cut is being extended north on the lead branch towards Vansittart's lode, which is about 60 fms. distant, by three men and three boys, at 4*l.* 10s. per fm.; this will be driven forward with the greatest celerity to reach the lode in the least time possible. From the indications and appearance of this lode near the surface it may confidently be hoped that it will be quite as valuable as either of the lodes we are now working on in Wheal Metal. Ivey's shaft, sinking perpendicularly below the 40, is now down to the 58, and will be communicated with the 60 cross-cut in about two month—sinking by six men and three boys, at 9*l.* 10s. per fm. We would here remark that in every level west, from the 60 inclusive to the bottom of the mine, we have rich courses of tin.

On SCHNEIDER'S LODE the 80 west of cross-cut is driven 18 fms., the lode is 3 ft. wide, worth 80*l.* per fm., driving by six men at 10*l.* per fm. The 70, east of cross-cut, is driven 23 fms., this has opened highly valuable tin ground, the lode is 3 ft. wide, worth 50*l.* per fm., driving by six men at 11*l.* per fm. The 70, west of cross-cut, is driven 23 fms., lode 5 ft. wide, worth 60*l.* per fm., driving by six men, at 10*l.* per fm. John's shaft is sunk and communicated to the 70: as, from the 50 to the 70, it was only carried of sufficient length and breadth to effect the communication with the rise coming up from below, in the least possible time; twelve men have been employed, at 8*l.* per fm., to bring down the shaft the proper length and breadth as deep as the 70, one portion of which it will take about four months to accomplish. The shaft is made the proper size as deep as the 50, where we find the lode 4 ft. wide, worth 30*l.* per fm. In the 80 west and the 70 east and west, 18 men in all are employed stoping the backs, at an average of 3*l.* 10s. per fm.; the value of the lode in the different stopes is 35*l.* per fm.; this lode in places is highly valuable from the bottom of the engine-shaft as high as the 50 in John's shaft, at which depth we shall immediately commence and drive two levels one east and the other west in a rich course of tin; the sinking of this shaft to the bottom of the mine will be proceeded with as fast as possible for the earliest and fullest development of Schneider's lode, and so that when the time arrives for fixing pitwork here this shaft may be in a fit and proper state to receive it. We calculate that John's shaft will be made complete to the 99 by the end of the present year. From the great extent to which we hope one day to extend our operations in Wheal Metal, it may be hereafter necessary to erect an engine in John's shaft, this may be gradually done without any material increase to the monthly cost. The tribute department throughout these mines consist of 35 pitches, employing 86 men and boys, at tributes varying from 5s. to 13s. 4d. in 1*l.*

It should be here observed that the most valuable ground in Wheal Metal is stoped on tutwork, and the ground of less value on tribute, keeping the tributers and tutwork men at a proper and safe distance apart. The average monthly getting per man is 3*l.* 11s. 6d. The number of persons employed in the mines is 1210. We have great pleasure in being able to state that at no former period has Wheal Metal been so valuable, or presented so great an extent of reserves of tin ground, or have we had such good prospects of increased quantities of tin from the main and Trueman's lodes. Our sales of tin have been steadily increasing, and we have every reason to believe that the quantities will increase as the rich tin ground in Wheal Metal is more thoroughly laid open by the bringing down of John's shaft, and sinking Ivey's shaft to lay open the great western lead of tin ground, which we may now more than ever hope for. The drainage of the water from the old mine will enable us to employ an increased number of tributers on the high ground east and west of Bounder shaft; and in this point, also, consequently increase our returns of tin, with a proportionate increase of profit to the proprietary.

Mr. CREASE said some explanation might be necessary as to the advantage of the delay that had taken place. It was not only a saving of 3500*l.*, but of a great deal of time in the subsequent operations of the mine. In carrying on the works he looked forward to the future, as he believed the property would be an inheritance for their children and grandchildren, and one of the great advantages of the delay was to facilitate the ascent and descent of the miners.

Mr. HUMBY said, so far as he was concerned, he was much indebted to Mr. Crease for the able report presented, and if anything was satisfactory, he considered that document must be so. He did not understand the details of mining, but he had such unbounded confidence in Mr. Crease, that to his mind the report was most gratifying.

Mr. NOAKES congratulated the shareholders that the present returns were beyond the expenses, with every chance of a large increase.

Mr. CREASE said they must excuse him if he did not tell the full particulars of their position. All he would say was that he had considerably understated the case. The principle upon which he had laid out the works of Wheal Vor was to make it a mine for their children and grandchildren, and Time, that great arbiter of all things, would decide it. (Hear.) They were laying out the mine, and spending four times the amount in tutwork than any other mine in Cornwall, and the time would come when they would open much more, and he hoped to see the expenses considerably increased, which he felt satisfied would cause a proportionate increase in the profits.

A resolution was then unanimously passed, that the reports and accounts be received and circulated among the shareholders.

The CHAIRMAN said, the next business was the re-election of the committee of management.—Mr. NOAKES had much pleasure in moving the re-election of the committee, and observed that past experience proved the able manner in which their affairs were conducted. Although they had not yet arrived at a dividend-paying state, he thought the time was fast approaching when they would be in that position. He concluded by moving the re-election of the committee.

Mr. HUMBY seconded the resolution, which was unanimously adopted with applause.

The auditors were then re-elected.

Mr. NOAKES said, as Capt. Martyn was in attendance, he wished to know whether he had any statement to make.

Capt. MARTYN said, he had nothing further to add to the information given by Mr. Crease and the Chairman, but he could fully confirm their statements. The draining was now going on much more rapidly than hitherto.

A cordial vote of thanks to the Chairman, the committee, and Mr. Crease, the manager, terminated the proceedings.

BOG LEAD MINING COMPANY.

A general meeting of adventurers was held at the Gun Tavern, Pimlico, on Monday.

Sir JOHN DORAT in the chair.

Mr. MADGE (the secretary) read the notice convening the meeting.—The following report from Capt. Barratt was read:—

March 14.—In the first place, we had to go through the adit level—viz., Boat level—about 1¼ mile, and we succeeded in going through it as far as the engine-shaft, where we found the back of the plat broken down and dammed, the water up about 4 ft. above the back of the level; consequently, we have to erect a horse-whim at the engine-shaft, so as to get down on the top of the run, to loose off the water with safety. This is in operation. We have also cleared up the footway shaft, and put in new ladders, and made it secure as far down as a level called Perkins's level, which is 13 fms. above the Boat level; and we are now engaged in securing this level towards the engine-shaft, for the purpose of taking up the water from going down the shaft. We expect to complete it to the shaft in three or four days, and shall proceed as fast as possible with loosing off the water from the Boat level, so as to have recourse to the ore ground that is in the eastern end and back of this level. We are happy to inform you that we have already set three pitches on tribute in the back of this level, which is yielding excellent ore, and one of which is producing 2½ tons per fathom—the other two about 1 ton per fm. There is a great quantity of ground of this description that will be available for working as soon as the water is drained off from this level—in fact, it is a good mine above the adit. Where we are getting the ore is 70 fms. deep. One pare of the tributers have broken full 4 tons of ore within the last three weeks, and the pitch is now looking well, with a leader of lead ore 9 in. wide, entering whole ground. Our chief object here, as before stated, is to get off the water as quickly as possible, and set on a number of men to work, both on tutwork and tribute, and open ground as fast as possible, which will enable us to be in the market at a very early period with monthly returns, and show to the world that the Bog Mine is a valuable property above the adit level. With regard to the mine below the adit, I would only hint that sufficient has already been said in former reports, but earnestly solicit the early arrival of the machinery; and when once planted, and the water taken out, such a mining property for lead cannot be excelled in Shropshire, if in England.

A statement of accounts was submitted, from which the following is condensed:—Calls received, 476*l.* 6s.—Mine costs and merchants' bills (from Jan. 23, 1856, to March 16, 1857), 305*l.* 1s. 11d.: leaving balance in hand, 171*l.* 4s. 1d.

The proceedings terminated with a vote of thanks to the Chairman.

WHEAL EDWARD MINING COMPANY.

The quarterly general meeting of proprietors was held at the offices of the company, Austinfriars, on Thursday,—Mr. ROWLANDS in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.—Mr. KING then read the following report:—

March 17.—North Lode: Since last general meeting, the diagonal shaft has been ceased down from the 54 to the 64, plat, &c., cut and completed in the 64, and the shaft is now down 4 fms. 1 ft. below that point. The ground is favourable for sinking, and congenial for copper ore. The 64 east has been driven 22 fms. 1 ft. 6 in., and a good lode has been met with for about 15 fms. of the driving, worth on the average from 18*l.* to 20*l.* per fm., and is equally good both in the back and bottom of the level. The lode in the end is 4 ft. wide, worth about 10*l.* per fm.; this end is getting near the middle cross-course, and there is a very valuable lode on the other side of it in the level above. The 64 west has been driven 9 fms. 1 ft., and is now west of the shaft about 14 fms.; at this point I am pleased to find a very material change for the better in the character of the lode; this end is now driven near the point where we expect to cut the shoot of ore seen in the level above. The 54 east has been driven 10 fms. 1 ft. 3 in. on the course of the lode, and is communicated to Wheal Arthur; the lode proved moderately productive for the whole distance, and is worth on the average 8*l.* to 10*l.* per fm. The lode east of the cross-course is valuable, and although every exertion has been made to prove the boundary, it is not yet settled to the satisfaction of the diallers; there is, however, sufficient proof of an engroachment on this sett. The 54 west has been driven 9 fms. 5 ft. 6 in., through a lode worth on the average from 19*l.* to 21*l.* per fm. The lode in the end is disordered at present, being divided by a horse of killas; this, however, I regard as a favourable indication, and is more likely to increase the value of the lode than diminish it. This end is now about in under Terrill's winze, which is being sunk below the 41. The lode shows evident signs of uniting again ere long, consequently we shall continue to drive on the south part of it, which is worth about 12*l.* per fm. The winze above referred to is coming down on the north part of the lode, which is worth 24*l.* per fm. The winze is now down 8 fms., and the value of the lode from top to bottom may be estimated at from 15*l.* to 16*l.* per fm. The lode in the western ground is strong and healthy. There have been about 37 fms. of ground stoped in Courtis's stopes, back of the 54 east, consequently you will observe that the operations have been principally confined to driving levels and sinking winzes, in order to open out ground; and I am glad to say success has followed our efforts, and a fair amount of ore ground has been laid open. There have been two winzes communicated from the 54 to the 64—Martin's and Dennis's; the latter was sunk through a valuable lode from level to level, worth on an average from 24*l.* to 26*l.* per fm.; this winze is west of the middle cross-course, and about 14 fms. east of Dennis's winze is Buller's winze, which is now down 2 fms. 5 ft.; the lode at this point is 7 ft. wide, worth 44*l.* per fm.; this winze is going down between the middle cross-course and the boundary cross-course. To give an estimate of the reserves below the 41, I should say it is something like 11,500*l.* worth of ore, out of which 9000*l.* worth has been discovered since Dec., 1856. I do not think it is practicable to estimate the reserves above the 41, as there is no level driven above that point. There are four pitches working in the back of the 41 east, at an average tribute of 6s. in 1*l.*, and the probabilities are that the shoots of ore will run up shallow, particularly between the cross-course and the caunter lode. This caunter lode I consider a very important feature, and I have no doubt the ore will follow it down to a great depth. Having stated our proceedings for the last three months on this lode, I would now suggest that the following tutwork be continued for the ensuing quarter—the sinking of the diagonal shaft, and the driving the 64 east and west, also the 54, and 41 west, and two pares of men sinking winzes. The back of the 54 east will be set on tribute after this month, and the returns may be calculated at 100 tons per month, against a loss of about 500*l.*—South Lode: All the necessary machinery has been erected for the further development of this lode, and the engine-shaft has been sunk 3 fms. 2 ft. below the 55; at this point the lode is from 5 to 6 ft. wide, composed of spar, prian, and mundic, and yielding good stones of ore—a strong, healthy lode, and the ground is moderately easy for sinking. We can set a pitch or two on this lode next month. The number of hands employed underground at present is 57 men on tutwork, 12 on tribute, 5 trammers, and 2 fillers, and at surface 34 persons on the average, making the total number employed 91 persons. The mine is now well stocked with good machinery, all of which is in excellent condition, and of ample power to carry on the operations with the greatest ease and economy. The mine is well ventilated, and in good working condition, and there is every prospect of opening out a profitable mine.—M. H. EAST.

P.S. According to my dialling, the distance east of the boundary cross-course to the boundary is 8 fms. 2 ft. 3 in. The ground stoped away is not yet measured.—M. H. E.

A statement of accounts was submitted, from which the subjoined is condensed:—

Balance last audit	£ 101	15	4
Mine cost, Nov., Dec., and Jan.	1311	4	7
Law costs and interest, and discount	165	10	0 = £1578 15 11
Calls received	512	0	0
Ore sold	975	4	6 = 1487 4 6
Balance against adventurers		£	91 11 5

Mr. KING stated that every account had been paid up to the end of Jan.

Mr. COOKE (Powell and Cooke) said that, judging from the large number of hands employed upon tutwork in comparison with the tributers, clearly proved that they were working the mine in a most miner-like way. He considered the report highly satisfactory.

Mr. OFFORD remarked that the report was very satisfactory, but he considered it would have been desirable to have had the captain in attendance to answer questions.

Mr. COOKE said that Mr. Metherell was present, and would confirm the report.

Mr. METHERELL said he was underground on Friday last, and could confirm everything that was stated in the report of Capt. East.

Mr. WM. WATSON, the purser, said that by increasing the cost 100*l.* per month, they had laid open 500*l.* worth of ore.

Mr. METHERELL remarked that in the 54 the lode was worth from 18*l.* to 20*l.* per fm.

Mr. OFFORD said the progress now making was very satisfactory, and he did not believe there was any painting in the report.

The report and accounts were then received and adopted.

Mr. COOKE said that Mr. Peter Watson had had the mine inspected by Capt. Edwards, and if there was no objection he should like to have it read.

Mr. PETER WATSON observed that Capt. Edwards had no objection to the publication of the report, and he would hand it in for the information of the shareholders. The following report and note appended were then read:—

Feb. 20.—This most promising mine is situated immediately to the west, and on the same lodes as Wheal Arthur; and, although only developed in this mine to a moderate extent, has laid open a very large quantity of valuable ground. The following are the particulars of the principal places in course of operation.—North Lode: The diagonal shaft is sunk on the course of this lode to the 64, and they have again resumed the sinking to a deeper level. The 64 east is driven 37 fms. from shaft, and they have still 40 fms. to reach the boundary; the lode in the end is 2 ft. wide, and worth 22*l.* per fm.; in the same level west the lode is 4 ft. wide, and produces stones of ore occasionally. It is fully expected to reach the rich shoot of ore gone down from the upper levels, in 5 or 6 fms. driving more. The 54 east is driven 70 fms. from shaft, and has recently intersected the boundary cross-course; the lode is, however, again opening out good to the east of it, and in the present end is of the most promising kind; they have still 7 fms. here to drive to reach the boundary, and when this is communicated the ventilation of this mine will be complete; the winze sinking in the bottom of this level is down 6 fms.; the lode is 3 ft. wide, and worth 25*l.* per fm. Courtis's stopes, in back of this level, are worth 15*l.* per fm., and are of the most promising kind. The 54 west is driven 21 fms. from shaft; the lode is 6 ft. wide, worth 21*l.* per fm.; there are some valuable reserves in back of this level. A winze is also sinking in bottom of the 41, 5 or 6 fms. before this end, the lode in which is 5 ft. wide, and worth 16*l.* per fm. There are also four pitches working in back of 41 east, and are producing fair quantities of copper ore.—South Lode: The water is again drawn out from the workings on this lode, and the shaft commenced sinking under 52; the lode in which is at present unproductive; but there are some good bunches of copper in one or two of the levels, and the lode, on the whole, presents some favourable indications for making ore in depth; and as operations here are again resumed, I would recommend that the shaft be sunk another 10 fms., and a level driven at that depth east to the boundary cross-course; this will prove this lode, and if it turns out good a level could be driven north on the cross-course to the principal lode; this would convey away the water to the engine-shaft, and do away with a great deal of the pumping expenses.—Reserves: In the 64 east there are 250 fms. worth 10*l.* per fm.—value, 2500*l.* In the 54 east 540 fms., worth 9*l.* per fm.—value 4860*l.*; in the same level west 70 fms., worth 18*l.* per fm.—value 1260*l.* In the 41 west 132 fms., worth 14*l.* per fm.—value 1848*l.*; in the same level east 480 fms., worth 7*l.* per fm.—value 3360*l.*: total value of reserves in the mine, 13,828*l.* In addition to this, they are opening upwards of 2500*l.* worth of ore monthly, which will rapidly add to the present resources, and when the 54 is communicated to Arthur, and the mine better ventilated (which will be done in two months more), they will be in a position to set a great quantity of productive ground on tribute; and in six months from this time, in my opinion, it ought to commence paying dividends.

I have just returned from Calstock, and enclose you the report of Wheal Edward. I am much pleased with the mine, it is much better than I expected to find it; it is one of the most promising mines in the eastern part of the county, and if worked in a proper manner will be in the dividend list in six months more; and taking all circumstances into consideration, I am of opinion that the price of shares will advance higher in a short time, and I would advise you and your friends to purchase and not sell at present prices.

Mr. KING said they had holed to Wheal Arthur sooner than expected, and found 4 fathoms of ground encroached upon by the Wheal Arthur adventurers. Mr. Henderson, a disinterested party, had been employed to go over the mine, with Capt. Webb, to dial it, as it was a matter of great anxiety to Capt. East. He (Mr. King) had received a letter from Mr. Henderson, saying that he hoped to have sent the result of his dialling in time for the meeting; there was no question but that the Wheal Arthur people had worked in the sett to an extent involving some hundreds of pounds, but he did not wish to hurry his report. Mr. Webb also apprehended that there would be no difficulty in getting the correct measurement of the ground taken away.

Mr. OFFORD said he had received a letter, stating that Wheal Arthur adventurers were indebted from 800*l.* to 1000*l.*

Mr. KING said the present meeting could do nothing. When the distance encroached was measured it was a simple question, as it was only to ascertain the amount of ore taken away.

Mr. HALLETT considered the matter had better be left in the hands of the committee.

The CHAIRMAN said the next question was the election of a committee, when it was proposed, that the old committee be re-elected, which was carried.

Mr. OFFORD called attention to the very low salary of the secretary. He had gone through the books, and from the quantity of business done he did not think that the amount, 6*l.* 6s. per month, paid his clerk's time.

Mr. METHERELL proposed that the salary be increased to 8*l.* 8s. per month, which was seconded by Mr. COOKE, and carried unanimously.

Votes of thanks were passed to the Chairman, committee, and secretary, to Mr. William Watson (the purser), for the clear manner in which the accounts were kept, and to Captain East. The proceedings then terminated.

Dividends of profits declared by Cornish and Devon Mines during the last Eleven Years, ending December, 1856, by R. TREDINNICK, Gresham House, London.

MINES.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	Total Amount for 11 years.	Dividends prior to 1845.	Market Value, Jan., 1857.	Total Divs. & Price, 1857.	Aggrg. Outlay Jan. 1857.
Asset	1,280	...	1,280	6,400	14,080	15,360	21,760	30,720	34,560	35,200	31,232	191,872	35,840	138,240	365,952	2,624
Ballswidden	2,040	933	...	2,929	3,451	3,247	1,948	2,307	406	...	...	17,254	8,894	6,500	32,648	18,270
Boscaswell Downs ...	...	...	...	800	...	...	...	...	...	...	...	800	47,200	...	48,000	nil.
Botallack	1,500	...	...	...	1,000	1,500	2,550	6,500	11,100	8,000	5,800	37,950	44,000	36,050	117,950	18,250
Bower	600	...	...	...	...	...	...	...	...	...	...	600	10,000	suspended.	10,600	1,024
Bullington	3,000	3,000	...	...	...	...	...	...	...	...	...	6,000	1,000	suspended.	7,000	39,250
Carn Brea	12,000	20,000	14,000	15,000	13,000	9,000	6,000	12,000	4,000	4,000	...	109,000	124,500	65,000	298,500	15,000
Chyprase	1,239	...	...	...	...	...	...	...	...	...	...	1,239	...	suspended.	1,239	2,360
Devon Great Consols ...	37,888	15,360	30,720	34,304	40,960	40,960	46,080	65,024	57,344	57,344	59,392	485,376	55,296	435,200	975,872	1,024
Dolcoath	...	...	...	...	...	...	...	2,595	537	1,074	5,101½	9,307½	153,707	37,600	200,614½	46,137
East Crofty	3,995	1,880	...	470	...	...	...	...	...	...	...	6,345	72,615	...	78,960	11,750
East Pool	...	...	...	...	...	...	...	...	640	1,280	3,200	5,120	29,824	39,680	74,624	3,104
East Rose	30,720	34,560	25,500	17,920	16,000	9,280	2,240	...	...	...	...	136,220	151,140	...	287,360	6,400
Fowey-Consols	...	...	...	...	1,976	...	...	...	...	988	3,705	6,669	202,644	25,000	234,313	20,480
Friendship	5,220	2,560	2,240	3,840	2,880	1,536	1,024	3,584	1,024	...	...	23,908	280,156	10,000	314,064	...
Great Consols	...	3,500	...	960	960	...	...	...	...	...	...	5,420	28,508	...	33,928	...
Great Work	...	...	...	2,677	4,165	2,975	3,451	2,082	1,785	...	3,867½	21,002½	4,404	20,000	45,406½	11,900
Levant	...	1,280	...	6,720	4,000	3,040	320	320	960	960	1,280	18,880	150,400	16,000	185,280	400
Margaret	2,016	6,720	3,136	4,368	3,136	1,568	392	952	2,016	1,904	3,920	30,128	1,792	18,000	49,920	8,848
North Roskear	4,550	2,450	1,820	1,120	2,800	4,270	910	2,380	...	...	...	20,300	81,700	12,600	114,600	7,400
Owles	...	...	...	...	...	...	996	4,040	3,400	920	1,720	11,076	4,816	24,000	39,892	5,600
Par Consols	...	3,072	12,800	19,200	12,800	5,120	15,360	4,800	...	7,680	19,200	100,032	75,968	130,000	306,000	7,200
Providence Mines ...	...	...	...	3,640	2,576	1,680	...	840	1,540	6,300	10,080	26,656	2,581	39,200	68,437	11,569
Seston	8,910	11,880	8,415	1,584	5,940	4,752	4,752	3,366	4,564	1,387	2,871	58,421	...	36,630	95,051	21,186
South Caradon	6,400	7,680	3,840	640	384	3,840	1,280	6,400	13,312	12,288	12,288	67,352	46,848	89,600	203,800	640
South Frances	744	9,796	5,704	7,192	10,478	10,416	6,696	6,076	7,440	19,964	26,288	110,794	992	178,960	290,746	9,393
St. Ives Consols ...	4,700	...	...	470	282	1,222	1,974	1,410	752	...	1,880	12,690	73,414	10,000	96,104	7,520
Tray Park	3,000	4,000	500	1,000	3,000	...	...	...	...	...	...	11,500	1,000	4,000	16,500	9,545
Tamar Consols ...	...	...	...	5,760	...	...	...	...	...	...	1,200	6,960	37,920	9,000	53,880	43,200
Tincroft	3,000	...	...	2,100	3,150	...	3,150	3,150	...	...	4,500	19,050	27,000	19,000	65,050	54,000
Trelawney	3,120	...	...	3,640	5,720	2,340	...	5,200	3,640	1,024	1,040	25,724	1,560	20,000	47,284	4,680
Trenow Consols	1,280	...	...	...	...	...	...	...	...	...	...	1,280	...	suspended.	1,280	6,480
Treavean	1,728	1,968	...	...	...	...	...	...	480	1,152	...	5,328	449,094	10,000	464,422	3,120
Trethellan	2,400	1,200	1,200	...	600	300	...	...	...	...	...	5,700	42,741	...	48,441	1,860
Treviskey and Barrier ...	1,920	5,910	2,180	3,120	8,760	6,780	4,770	740	720	...	...	34,900	3,020	suspended.	37,920	15,600
United Mines	7,500	2,500	1,000	2,000	1,000	500	5,000	11,600	800	3,600	800	36,300	438,900	56,000	531,200	16,000
West Caradon	8,320	4,864	2,460	3,840	1,920	4,224	7,424	10,496	6,912	4,352	...	54,812	18,212	35,840	108,864	5,120
West Providence	768	704	409	2,048	1,024	2,560	10,752	6,656	3,328	1,280	2,816	32,345	...	14,000	46,345	5,120
Ball	...	120	...	...	...	...	...	...	...	240	...	360	...	1,560	1,920	1,560
Franco	...	388	...	388	...	...	...	...	...	...	...	776	...	...	776	14,760
North Pool	...	1,000	7,750	11,750	14,250	9,000	5,500	7,000	5,200	..	...	61,450	...	15,000	76,450	4,500
Sisters	...	1,024	...	...	...	...	...	...	...	...	...	1,024	...	suspended	1,024	7,518
Spearne Moor	...	700	256	880	1,376	1,920	2,048	896	...	840	350	9,266	...	4,200	13,466	1,280
Trehane	...	1,280	1,472	2,688	896	1,024	128	2,048	3,072	2,048	...	14,656	...	...	14,656	1,536
Treleigh Consols ...	...	4,500	1,000	...	...	...	...	...	...	...	...	5,500	...	1,000	6,500	30,000
Vyvyan	...	552	...	...	...	...	...	...	...	...	...	552	...	suspended	552	nil.
Bedford United ...	...	...	2,000	3,000	4,000	4,600	4,000	4,700	5,400	5,800	2,500	36,000	...	29,000	65,000	9,333
Buller	...	...	...	2,560	13,120	17,920	24,960	45,440	53,760	33,280	23,040	214,080	...	64,000	278,080	1,280
Comfort	...	...	...	1,654	768	...	...	...	...	...	...	2,422	...	suspended	2,422	19,200
Condurrow	...	...	...	1,536	1,280	512	2,304	4,608	2,304	2,048	3,840	18,432	...	41,000	59,432	5,120
Great Polgooth ...	...	...	...	5,504	...	1,100	4,950	...	...	...	...	11,554	...	suspended	11,554	49,843
Mary Ann	...	...	...	640	5,632	4,608	1,024	1,792	1,024	1,280	7,680	23,680	...	46,000	69,680	8,192
Tremayne	...	...	...	512	3,328	3,584	3,072	512	384	...	...	11,392	...	5,000	16,392	10,368
Wellington	...	...	...	896	1,024	768	...	...	...	128	...	2,816	...	suspended	2,816	8,488
Alfred Consols ...	...	...	...	...	2,048	9,472	16,128	20,736	16,896	5,888	8,704	79,872	...	92,000	171,872	13,269
Friendly	...	...	...	...	500	...	...	...	...	...	...	500	...	suspended	500	7,000
Lewis	...	...	...	...	500	1,500	...	...	...	...	...	2,000	...	15,000	17,000	17,000
Lovell	...	...	...	...	860	3,440	4,300	1,720	2,580	...	430	13,330	...	9,500	22,830	14,190
North Basset	...	...	...	...	3,000	1,500	1,500	6,000	4,500	21,750	26,850	65,100	...	216,000	281,100	nil.
Penzance Consols	...	...	...	...	128	...	...	...	...	...	...	128	...	suspended	128	3,656
Reeth	...	...	...	...	3,000	3,000	2,500	...	...	...	...	8,500	...	2,500	11,000	5,820
South Tolgus	...	...	...	...	3,712	4,224	7,168	2,304	...	...	...	17,408	...	38,500	55,908	4,996
Calstock United ...	...	...	...	...	...	1,000	...	...	...	...	...	1,000	...	suspended	1,000	11,421
Golden	...	...	...	...	...	3,250	1,250	...	...	...	...	4,500	...	suspended	4,500	21,250
Herodsfoot	...	...	...	...	...	384	...	1,920	384	...	...	2,688	...	4,000	6,688	8,704
Perran St. George	...	...	...	...	...	2,030	...	...	...	...	...	2,030	...	...	2,030	24,940
Phœnix	...	...	...	...	...	3,000	10,000	10,000	10,000	10,000	7,500	50,500	...	80,000	130,500	6,000
Polberrow	...	...	...	...	...	2,680	...	3,283	2,525	2,416	3,295⅝	14,199⅝	...	...	14,199⅝	15,000
Trumpet Consols ...	...	...	...	...	...	500	2,000	2,000	1,500	...	...	6,000	...	7,500	13,500	9,500
Clifford	...	...	...	...	...	..	360	568	...	1,344	5,500	7,772	...	137,500	135,272	...
Drake Walls	...	...	...	...	...	...	640	960	...	...	1,600	3,200	..	20,000	23,200	24,960
Exmouth and Adams ...	...	...	...	...	...	...	1,605	1,070	2,589	2,565	5,130	12,959	...	48,000	60,959	26,790
Gonamena	...	...	...	...	...	...	256	...	...	...	...	256	...	26,500	26,756	14,080
Great Onslow	...	...	...	...	...	...	5,000	...	...	...	...	5,000	..	suspended	5,000	29,833
Jane	...	...	...	...	...	...	256	1,792	...	...	...	2,048	...	10,000	12,048	nil.
Rix Hill	...	...	...	...	...	...	389	779	...	...	...	1,168	...	suspended	1,168	6,818
South Tamar	...	..	...	...	...	...	4,500	7,875	10,125	5,700	4,500	32,700	...	suspended	32,700	11,925
St. Aubyn and Grylls ...	...	...	...	...	...	...	896	...	...	...	...	896	...	suspended	896	3,072
Arthur	...	...	...	...	...	...	...	614	3,684	3,070	...	7,368	...	9,000	16,368	11,052
Mark Valley	...	...	...	...	...	...	...	750	...	900	...	1,650	...	24,000	25,650	27,150
Trelyon	...	...	...	...	...	...	...	429	572	...	...	1,001	...	5,500	6,501	6,578
Treweatha	...	...	...	...	...	...	...	1,024	1,638	1,024	2,457⅜	6,143⅜	...	14,500	20,643⅜	14,336
West Darlington	...	...	...	...	...	...	...	256	...	...	...	256	...	suspended	256	13,952
West Treasury	...	...	...	...	...	...	...	1,024	...	...	...	1,024	...	suspended	1,024	10,487
East Margaret	...	...	...	...	...	...	...	...	256	...	...	256	...	4,000	4,256	6,016
Great Crinnis	...	...	...	...	...	...	...	...	1,500	...	...	1,500	...	...	1,500	30,000
Hingston Downs ...	...	...	...	...	...	...	...	...	4,050	8,250	3,600	15,900	...	24,000	39,900	19,125
Tywarnhale	...	...	...	...	...	...	...	...	3,750	...	...	3,750	...	suspended	3,750	suspended
West Basset	...	...	...	...	...	...	...	...	9,000	21,000	23,850	53,850	...	204,000	257,850	9,000
West Damsel	...	...	...	...	...	...	...	...	1,536	2,560	512	4,608	...	22,000	26,608	2,650
West Seaton	...	...	...	...	...	...	...	...	3,000	7,000	13,600	23,600	...	140,000	163,600	15,400
Kenneggy	...	...	...	...	...	...	...	...	410	...	...	410	...	...	410	...
Carnyorth	...	...	...	...	...	...	...	...	...	921	614	1,535	...	10,000	11,535	6,144
Charlotte	...	...	...	...	...	...	...	...	...	1,536	...	1,536	...	4,000	5,536	3,840
Great South Tolgus ...	...	...	...	...	...	...	...	...	...	750	...	750	...	84,000	84,750	15,000
Great Vor	...	...	...	...	...	...	...	...	...	6,666	...	6,666	...	160,000	166,666	133,330
Kitty (Lelant) ...	...	...	...	...	...	...	...	...	...	1,024	2,274	3,298	...	14,000	17,298	1,390
Rosewarne	...	...	...	...	...	...	...	...	...	7,936	6,912	14,848	...	23,000	37,848	6,144
South Crinnis	...	...	...	...	...	...	...	...	...	7,680	...	7,680	...	38,000	45,680	2,432
Wrey	...	...	...	...	...	...	...	...	...	3,276	5,530	8,806	...	34,500	43,306	5,940
Boscean	...	...	...	...	...	...	...	...	...	...	2,880	2,880	...	21,000	23,880	4,920
Ding Dong	...	...	...	...	...	...	...	...	...	...	7,056	7,056	...	22,500	29,556	21,504
Fortescue	...	...	...	...	...	...	...	...	...	...	375	375	...	...	375	nil.
Kitty (St. Agnes) ...	...	...	...	...	...	...	...	...	...	...	750	750	...	35,000	35,750	22,500
Sortridge Consols ...	...	...	...	...	...	...	...	...	...	...	4,500	4,500	...	20,000	24,500	3,600
Tretoil	...	...	...	...	...	...	...	...	...	...	1,000	1,000	...	...	1,000	2,400
	159,838	155,381	129,682	185,743	225,464	217,486	255,563	325,338	312,899	339,617	379,011	2,685,022	2,707,686	3,362,810	8,755,518	1,280,246

Extracted from R. TREDINNICK'S Review of Cornish and Devon Mining, for the years 1850 to 1856. Published at 5s., bound. Copies may be had at the *Mining Journal* Office.

I refer the reader to the above synopsis of Div. Mines of Cornwall and Devon for 11 years, viz., 1846 to 1856 inclusive; prior to 1846, 35 companies only yielded profits, of these 2 were in Devon, against 33 in Cornwall: the former were Friendship and Devon Great Consols; these are first-class prizes, and shew the following results:—Friendship yielded profits amounting to 304,064*l.*, of which 23,908*l.* only have resulted from the past 11 years; at present price of copper increased profits will probably arise. Devon Great Consols, upon a capital of 1,024*l.*, divided 55,296*l.* prior to 1846, and the enormous sum of 485,376*l.* since, averaging 44,123*l.* annually; in addition thereto, the commercial value of the property is upwards of 470,000*l.* The success attending these adventures led to reckless speculation; numerous companies were formed in hopes of like results; many became abandoned, others proved valueless, whilst unhappily the following only have yielded divs.:—Franco 388*l.* in 1847, and 388*l.* in 1849; Bedford United from 1848 to 1856, 36,000*l.*; Exmouth and Adams, from 1852 to 1856, 12,959*l.*; this mine yields lead, and prospects are encouraging, the returns will annually increase, until yield and profits equal the first mine in the west of England; the shares, 5,700 in number, are selling at 8*l.* 10*s.* each: the price must ultimately range far higher. Rix Hill, a tin mine, long since abandoned, gave divs. of 389*l.* in the year 1852, and 770*l.* during 1853; lastly, we have Sortridge Consols, that, upon an outlay of 3,600*l.*, declared divs. during 1856 of 4,500*l.*;—this mine has sadly disappointed expectations, a shallow deposit of ore was discovered, and the most made of it for market operations; the result is, many are dissatisfied with buying at high prices into an adventure, instead of an ascertained property like the Devon Great Consols, which the Tavistock clique pronounced it at first to be.

I now cross the Tamar, and am pleased to compare what Cornish mines have accomplished during the years in question. At the close of 1845, 32 mines had paid divs., 18 of which continued to pay at the close of 1856; of the remainder, Chyprase, Treviskey and Barrier, Callington, and Trenow Consols are abandoned; East Rose, Great Consols, East Crofty, and Stray Park have been sold, re-worked under different names, divided, or amalgamated with other companies, having yielded divs. in the aggregate of 682,884*l.*, as follows:—East Rose 287,360*l.*, Gt. Consols 304,064*l.*, East Crofty 78,960*l.*, Stray Park, 12,500*l.* Balleswidden and Boscaswell Downs are tin mines still at work, and likely to resume divs. West Caradon, upon a capital of 5,120*l.*, has yielded aggregate profits of 73,024*l.*, and without intermission to the close of 1856, with a certainty of resuming in 1857, it commands 140*l.* per share. Brewer paid divs. of 10,600*l.*; Carn Brea, 233,500*l.*; North Roskear, 102,000*l.*; Treavean, 453,422*l.*; and Trethellan, 48,441*l.*, still ranking as important properties, although no divs. were declared by either during 1856. Of the 18 mines paying divs. prior to the close of 1846, 7 are in the Buller and Basset district, viz.—Basset, Dolcoath, East Pool, Seton, South Frances, Tincroft, and United Mines. The Botallack and Levant are in St. Just, and still rank amongst our best mines. The former, upon an outlay of 18,256*l.*, has yielded profits of 81,950*l.*, and the latter 169,280*l.*, upon 400*l.* only: both are situate in the rugged cliffs near the Land's End, and the works extend considerably under the waters of the Atlantic. The resources increase rather than diminish in depth; divs., however, are less than formerly, as expenses run higher in proportion to returns. These mines are visited by travellers in West Cornwall as two of the chief attractions in that picturesque and wild country.

The following tin mines paid in 1846, and are paying divs. at the close of 1856:—Great Work, Margaret, Owles, Providence, St. Ives Consols, and West Providence; all of these will do better for the ensuing year, and prices of shares will advance materially. In the Caradon district we have South Caradon still as good as in 1846, with Par Consols and Fowey Consols in the St. Austell district, both improving. These mines, which adjoin, have paid profits of 385,313*l.*, and are ably managed by Captain John Puckey.

During the past 11 years, 70 mines have commenced to pay divs., as follows:—

Date.	BULLER & BASSET DISTRICT.	Outlay.	Dividends.	Market Value.
1847	North Pool	4,500	61,450	15,000
1848	Buller	1,280	214,080	64,000
1848	Comfort	—	2,422	suspended.
1848	Condurrow	5,120	18,432	41,000
1850	North Basset	nil.	65,100	216,000
1850	South Tolgus	4,096	17,408	32,000
1852	Clifford	—	7,772	137,500
1854	West Basset	9,000	23,600	204,000
1854	West Damsel	2,650	4,608	20,000
1854	West Seton	15,400	23,600	140,000
1855	Great South Tolgus	15,000	750	84,000
		57,046	489,222	953,500

At Menheniot we have Trehane, profits of 14,656*l.* to 1,536*l.*, outlay, Mary Ann, 23,680*l.* to 2,688*l.*; Herodsfoot, 2,688*l.* to 8,704*l.*; Treweatha 6,143*l.* 12*s.* to 14,336*l.*; and Wrey, 8,806*l.* to 5,940*l.* With a fair price for lead these mines would pay better. A Basset, Buller, Clifford, or West Seton, with several of the western copper mines, are singly more valuable than all the lead mines at work in Cornwall. A young mine called Trethellan Wheal Rose, however, presents unusual chances of success, and will, in all probability, prove a great favourite with the London public.

The tin mines, in various districts which have become profitable since the close of 1845 are—West Providence, 32,345*l.* profits, outlay 5,120*l.*; Ball, 360*l.* to 1,560*l.*; Spearne Moor, 9,626*l.* to 1,280*l.*; Lewis, 2,000*l.* to a large outlay; under change of management, and improved prospects, early divs. will probably follow. Lovel, 13,330*l.* to 14,190*l.*; Reeth, 8,500*l.* to 5,820*l.*; Polberrow, 14,199*l.* to 15,000*l.*; Trumpet Consols, 6,000*l.* to 9,500*l.*; Drake Walls, 3,200*l.* to 25,000*l.*—prospects advancing; Trelyon, 1,001*l.* to 6,758*l.*—management changed, and promise better divs.; East Margaret, 256*l.* to 6,016*l.*; Carnyorth, 1,535*l.* to 6,144*l.*; Great Vor, 6,666 against a very large outlay—in a year or two the yield and profits will be immense; Kitty Lelant, a very improving property, divs. of 3,298*l.* to an outlay of 1,390*l.*—price will advance. Boscean declared her maiden div. in 1856, 2,880*l.* against 4,920*l.* outlay; the shares 85*l.*, will probably advance to 150*l.* Ding Dong declared 7,056*l.* divs. during 1856; this mine has been at work upwards of 100 years, although no profits resulted for many years. The advance in price of tin will enable it to pay large divs., as the works are extensive, and immense quantities of low priced stuff can be brought to market. Kitty St. Agnes is an extraordinary mine; the returns will considerably increase, and profits become large in proportion to costs: the shares, 5,000 in number, are 7*l.*; before the ensuing year expires they will probably be 10*l.* to 15*l.*, or even more.

The following mines have paid divs. since 1845, yet from various causes have subsequently become defunct and abandoned:—Sisters 1,024*l.*; Vyvyan 552*l.*; Great Polgooth 11,554*l.*; Wellington 2,816*l.*; Friendly 500*l.*; Penzance Consols 128*l.*; Calstock United 1,000*l.*; Golden 4,500*l.*; Great Onslow 5,000*l.*; St. Anbyn and Grylls 896*l.*; West Darlington 256*l.*; West Treasury 1,024*l.*; Tywarnhale 3,750*l.* Most were badly managed, others failed from legitimate causes. North Pool commenced paying in 1847, and continued to the close of 1854, having yielded 61,450*l.*, outlay 4,500*l.*: at one time it sold for 100,000*l.*, against 15,000*l.* now. Treleigh Consols paid 4,500*l.* in 1847, and 1,000*l.* 1848; the yield is copper. The company's grant is too far east to be influenced by the north and south cross-courses which rendered the lodes in the north and south parallel so very productive, from the Old Tolgus United up to the Buller and Basset United. Alfred Consols commenced to pay in 1850, and in that and the six following years divs. of 79,872*l.* were declared: the mine is well worked, and increased profits will follow, as discoveries of additional riches are continually being made. Phœnix, a prize of great magnitude, is in the Caradon district. Gonamena paid a solitary div. in 1852 of 256*l.* only, since which numerous calls have been made. South Tamar paid 32,700*l.*, outlay 11,925*l.* from the year 1852 to 1856 inclusive, and would have continued profitable for years yet to come, had not the River Tamar inundated the works; the commercial value of this property was destroyed at once. The same confidence existed previously, as regards security from the misfortune in question, as is now felt against the waters of the Atlantic, in the cases of Botallack and Levant.

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They made, however, in another part of the mine, near the surface, a valuable discovery of tin, on the same vein from which the Tretoil Company are making large returns. At this period the lord of the mine, in consequence of the company having stopped the engine, &c., issued a deed of revocation, and claimed the mine and materials at a valuation, according to the terms of the lease.

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